Lab 7

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USN : 1BM23CS009

```java
import java.util.Scanner;
class NegativeAgeError extends Exception {
        int a;
        public NegativeAgeError(int a) {
                this.a = a;
        }
        public String toString() {
                return "Negative Age: " + a;
        }
}


class InvalidAgeError extends Exception {
        int a, b;
        public InvalidAgeError(int a, int b) {
                this.a = a;
                this.b = b;
        }
        public String toString() {
                return "Invalid Age: " + a + " is less than " + b;
        }
}
```

```java
class Father {

    String name;

    int age;

    Father(String name, int age) {

        try {

            if(age < 0) {

                throw new NegativeAgeError(age);

            }

            this.name = name;

            this.age = age;

        }

        catch(NegativeAgeError e) {

            System.out.println(e);

        }

    }

}

class Son extends Father {

    String sonName;

    int sonAge;

    Son(String sonName, int sonAge, String fatherName, int fatherAge) {

        super(fatherName, fatherAge);

        this.sonName = sonName;

        try {

            if(sonAge < 0) {
```

```java
                    throw new NegativeAgeError(sonAge);
                }
                if(sonAge >= fatherAge){
                    throw new InvalidAgeError(sonAge, fatherAge);
                }
                this.sonAge = sonAge;
            }
            catch(NegativeAgeError e) {

                System.out.println(e);
            }
            catch(InvalidAgeError e) {

                System.out.println(e);
            }
        }
}

class Exceptions {
        public static void main(String[] args){
System.out.println("Abhinav Sanjay\nUSN : 1BM23CS009");
Scanner sc=new Scanner(System.in);
System.out.println("Enter son name");
String name=sc.next();
System.out.println("Enter son age");
int age=sc.nextInt();
```

```java
System.out.println("Enter father name");

String Name=sc.next();

System.out.println("Enter fathers age");

int Age=sc.nextInt();


        Son a1 = new Son(name,age,Name,Age);

System.out.println("End of program");



    }
}
```

```
C:\Abhinav 3A>java Exceptions
Abhinav Sanjay
USN : 1BM23CS009
Enter son name
a
Enter son age
5
Enter father name
b
Enter fathers age
3
Invalid Age: 5 is less than 3

C:\Abhinav 3A>java Exceptions
Abhinav Sanjay
USN : 1BM23CS009
Enter son name
a
Enter son age
5
Enter father name
b
Enter fathers age

-4
Negative Age: -4
Invalid Age: 5 is less than -4
```